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Terms	Documents
L3 and fer\$5 and hydrogen peroxide	10

**Database:**

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 US Pre-Grant Publication Full-Text Database  
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 EPO Abstracts Database  
 Derwent World Patents Index  
 IBM Technical Disclosure Bulletins

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**DATE:** Monday, September 30, 2002    [Printable Copy](#)    [Create Case](#)

<u>Set Name</u> side by side	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u> result set
<i>DB=USPT,PGPB,JPAB,EPAB,DWPI,TDBD; PLUR=YES; OP=ADJ</i>			
<u>L4</u>	L3 and fer\$5 and hydrogen peroxide	10	<u>L4</u>
<u>L3</u>	L2 and lithium	25	<u>L3</u>
<u>L2</u>	polyuronic acid and 536/\$	57	<u>L2</u>
<u>L1</u>	polyuronic acid.ti.	14	<u>L1</u>

END OF SEARCH HISTORY

**WEST**[Generate Collection](#)[Print](#)**Search Results - Record(s) 1 through 10 of 10 returned.**☐ 1. Document ID: US 20020016453 A1

L4: Entry 1 of 10

File: PGPB

Feb 7, 2002

PGPUB-DOCUMENT-NUMBER: 20020016453

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020016453 A1

TITLE: Process for the manufacture of polyuronic acids

PUBLICATION-DATE: February 7, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Marritt, William	Nagano-Ken		JP	

US-CL-CURRENT: 536/123[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#)[KIMC](#) [Draw Desc](#) [Image](#)☐ 2. Document ID: US 6444660 B1

L4: Entry 2 of 10

File: USPT

Sep 3, 2002

US-PAT-NO: 6444660

DOCUMENT-IDENTIFIER: US 6444660 B1

TITLE: Lipid soluble steroid prodrugs

[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#)[KIMC](#) [Draw Desc](#) [Image](#)☐ 3. Document ID: US 6416740 B1

L4: Entry 3 of 10

File: USPT

Jul 9, 2002

US-PAT-NO: 6416740

DOCUMENT-IDENTIFIER: US 6416740 B1

TITLE: Acoustically active drug delivery systems

[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#)[KIMC](#) [Draw Desc](#) [Image](#)☐ 4. Document ID: US 6231834 B1

L4: Entry 4 of 10

File: USPT

May 15, 2001

US-PAT-NO: 6231834

DOCUMENT-IDENTIFIER: US 6231834 B1

TITLE: Methods for ultrasound imaging involving the use of a contrast agent and multiple images and processing of same

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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RIMC	Draw Desc	Image
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☐ 5. Document ID: US 6139819 A

L4: Entry 5 of 10

File: USPT

Oct 31, 2000

US-PAT-NO: 6139819

DOCUMENT-IDENTIFIER: US 6139819 A

TITLE: Targeted contrast agents for diagnostic and therapeutic use

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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RIMC	Draw Desc	Image
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☐ 6. Document ID: US 6123923 A

L4: Entry 6 of 10

File: USPT

Sep 26, 2000

US-PAT-NO: 6123923

DOCUMENT-IDENTIFIER: US 6123923 A

TITLE: Optoacoustic contrast agents and methods for their use

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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RIMC	Draw Desc	Image
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☐ 7. Document ID: US 6090800 A

L4: Entry 7 of 10

File: USPT

Jul 18, 2000

US-PAT-NO: 6090800

DOCUMENT-IDENTIFIER: US 6090800 A

TITLE: Lipid soluble steroid prodrugs

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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RIMC	Draw Desc	Image
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☐ 8. Document ID: US 6071494 A

L4: Entry 8 of 10

File: USPT

Jun 6, 2000

US-PAT-NO: 6071494

DOCUMENT-IDENTIFIER: US 6071494 A

TITLE: Methods for diagnostic imaging using a contrast agent and a renal vasodilator

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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RIMC	Draw Desc	Image
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☐ 9. Document ID: US 6028066 A

L4: Entry 9 of 10

File: USPT

Feb 22, 2000

US-PAT-NO: 6028066

DOCUMENT-IDENTIFIER: US 6028066 A

TITLE: Prodrugs comprising fluorinated amphiphiles

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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RMC	Draw Desc	Image
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☐ 10. Document ID: US 5846517 A

L4: Entry 10 of 10

File: USPT

Dec 8, 1998

US-PAT-NO: 5846517

DOCUMENT-IDENTIFIER: US 5846517 A

TITLE: Methods for diagnostic imaging using a renal contrast agent and a vasodilator

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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RMC	Draw Desc	Image
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Terms	Documents
L3 and fer\$5 and hydrogen peroxide	10

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**WEST**[Generate Collection](#)[Print](#)**Search Results - Record(s) 1 through 10 of 14 returned.**☐ 1. Document ID: US 20020016453 A1

L1: Entry 1 of 14

File: PGPB

Feb 7, 2002

PGPUB-DOCUMENT-NUMBER: 20020016453

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020016453 A1

TITLE: Process for the manufacture of polyuronic acids

PUBLICATION-DATE: February 7, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Marriott, William	Nagano-Ken		JP	

US-CL-CURRENT: 536/123

<a href="#">Full</a>	<a href="#">Title</a>	<a href="#">Citation</a>	<a href="#">Front</a>	<a href="#">Review</a>	<a href="#">Classification</a>	<a href="#">Date</a>	<a href="#">Reference</a>	<a href="#">Sequences</a>	<a href="#">Attachments</a>	<a href="#">Claims</a>	<a href="#">KIMC</a>	<a href="#">Draw Desc</a>	<a href="#">Image</a>
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☐ 2. Document ID: US 6242529 B1

L1: Entry 2 of 14

File: USPT

Jun 5, 2001

US-PAT-NO: 6242529

DOCUMENT-IDENTIFIER: US 6242529 B1

TITLE: Aqueous ink jet compositions comprising a hydrophobic polymer functionalized polyuronic acid dispersent, and method of using

<a href="#">Full</a>	<a href="#">Title</a>	<a href="#">Citation</a>	<a href="#">Front</a>	<a href="#">Review</a>	<a href="#">Classification</a>	<a href="#">Date</a>	<a href="#">Reference</a>	<a href="#">Sequences</a>	<a href="#">Attachments</a>	<a href="#">KIMC</a>	<a href="#">Draw Desc</a>	<a href="#">Image</a>
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☐ 3. Document ID: US 4504504 A

L1: Entry 3 of 14

File: USPT

Mar 12, 1985

US-PAT-NO: 4504504

DOCUMENT-IDENTIFIER: US 4504504 A

TITLE: Texture preservation for diced fresh food products using gelled polyuronic acids

<a href="#">Full</a>	<a href="#">Title</a>	<a href="#">Citation</a>	<a href="#">Front</a>	<a href="#">Review</a>	<a href="#">Classification</a>	<a href="#">Date</a>	<a href="#">Reference</a>	<a href="#">Sequences</a>	<a href="#">Attachments</a>	<a href="#">KIMC</a>	<a href="#">Draw Desc</a>	<a href="#">Image</a>
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☐ 4. Document ID: JP 2002047302 A

L1: Entry 4 of 14

File: JPAB

Feb 12, 2002

PUB-NO: JP02002047302A  
DOCUMENT-IDENTIFIER: JP 2002047302 A  
TITLE: METHOD FOR MANUFACTURING POLYURONIC ACID

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KMCC	Draw Desc	Image
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☐ 5. Document ID: JP 56079101 A

L1: Entry 5 of 14

File: JPAB

Jun 29, 1981

PUB-NO: JP356079101A  
DOCUMENT-IDENTIFIER: JP 56079101 A  
TITLE: POLYURONIC ACID DERIVATIVE, MANNO-GULONOLYCAN DERIVED FROM SEAWEED

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KMCC	Draw Desc	Clip Img	Image
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☐ 6. Document ID: EP 1153933 A1

L1: Entry 6 of 14

File: EPAB

Nov 14, 2001

PUB-NO: EP001153933A1  
DOCUMENT-IDENTIFIER: EP 1153933 A1  
TITLE: Process for the manufacture of polyuronic acids

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KMCC	Draw Desc	Image
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☐ 7. Document ID: JP 2002047302 A EP 1153933 A1 US 20020016453 A1

L1: Entry 7 of 14

File: DWPI

Feb 12, 2002

DERWENT-ACC-NO: 2002-091628  
DERWENT-WEEK: 200227  
COPYRIGHT 2002 DERWENT INFORMATION LTD

TITLE: Manufacture of low molecular weight polyuronic acid useful as scale inhibitors and scale deposit removers, by adding hydrogen peroxide and a ferrous salt to a solution of high molecular weight polyuronic acid

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KMCC	Draw Desc	Image
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☐ 8. Document ID: ES 2168862 T3 WO 9955397 A1 FR 2778081 A1 AU 9934251 A EP 1075289 A1 EP 1075289 B1 DE 69900556 E AU 743763 B JP 2002512857 W

L1: Entry 8 of 14

File: DWPI

Jun 16, 2002

DERWENT-ACC-NO: 2000-013363  
DERWENT-WEEK: 200246  
COPYRIGHT 2002 DERWENT INFORMATION LTD

TITLE: Reinforcement of sutured tissue using textile of polyuronic acid

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KMCC	Draw Desc	Image
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☐ 9. Document ID: SU 459207 A

L1: Entry 9 of 14

File: DWPI

Apr 11, 1975

DERWENT-ACC-NO: 1975-66850W

DERWENT-WEEK: 197540

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TITLE: Protein concentrates prepn. - by pptn., from dil. protein soln. by polyuronic acids (salts) useful as food additives

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KIMC	Draw Desc	Image
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☐ 10. Document ID: SU 447163 A

L1: Entry 10 of 14

File: DWPI

Mar 12, 1975

DERWENT-ACC-NO: 1975-63598W

DERWENT-WEEK: 197538

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TITLE: Microencapsulation of water immiscible liquids - using gelatin and polyuronic acid or its water soluble deriv

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KIMC	Draw Desc	Image
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polyuronic acid.ti.	14

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**WEST**[Generate Collection](#)[Print](#)**Search Results - Record(s) 11 through 14 of 14 returned.**

☐ 11. Document ID: BE 788844 A CA 977233 A CH 568725 A CS 7206480 A DD 102913 A DE 2246221 A DE 2246221 C FR 2154031 A GB 1391614 A IT 1048261 B JP 48056896 A JP 76009037 B NL 174801 B NL 7212711 A RO 62793 A US 3861400 A ZA 7206189 A

L1: Entry 11 of 14

File: DWPI

DERWENT-ACC-NO: 1973-12416U

DERWENT-WEEK: 197309

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TITLE: Smoking material - contg a nicotine deriv of a polyuronic acid as reinforcement

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KIMC	Draw Desc	Image
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☐ 12. Document ID: DE 1443488 B

L1: Entry 12 of 14

File: DWPI

DERWENT-ACC-NO: 1968-23011Q

DERWENT-WEEK: 196800

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TITLE: Derivatives/degradation products of galactomannanes, polyuronic acids etc. are produced by heating powdered starting material gradual in vacuo with continuous r

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KIMC	Draw Desc	Image
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☐ 13. Document ID: US 3159539 A

L1: Entry 13 of 14

File: DWPI

DERWENT-ACC-NO: 1966-14819F

DERWENT-WEEK: 196800

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TITLE: Compn. comprising a silver salt of a polyuronic acid with m.w. 1000 - 5000, and a soap, cosmetic or pharmaceutical vehicle. Claims restricted to such comp

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KIMC	Draw Desc	Image
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☐ 14. Document ID: GB 948417 A

L1: Entry 14 of 14

File: DWPI

DERWENT-ACC-NO: 1966-10553F

DERWENT-WEEK: 196800



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TITLE: Bi polysaccharide complexes, esp. when polysaccharide is derived from a polyuronic acid (esp. pectin), a gum, a mucilage, a starch deriv. a cellulose deriv. or

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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RMC	Draw Desc	Image
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Terms	Documents
polyuronic acid.ti.	14

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polyuronic acid

213 POLYURONIC

3442022 ACID

L1 66 POLYURONIC ACID  
(POLYURONIC (W) ACID)

=> s l1 and hydrogen peroxide and ferrous and lithium

711184 HYDROGEN

161893 PEROXIDE

79177 HYDROGEN PEROXIDE

(HYDROGEN (W) PEROXIDE)

53961 FERROUS

244172 LITHIUM

L2 1 L1 AND HYDROGEN PEROXIDE AND FERROUS AND LITHIUM

=> d l1 ibib abs hitstr

L1 ANSWER 1 OF 66 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2001:830738 CAPLUS

DOCUMENT NUMBER: 135:372182

TITLE: Process for the manufacture of low molecular weight  
polyuronic acids by oxidative depolymerization

INVENTOR(S): Marritt, William

PATENT ASSIGNEE(S): Seiko Epson Corporation, Japan

SOURCE: Eur. Pat. Appl., 17 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1153933	A1	20011114	EP 2001-111559	20010511
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002047302	A2	20020212	JP 2001-141271	20010511
US 2002016453	A1	20020207	US 2001-855128	20010514
PRIORITY APPLN. INFO.:			JP 2000-140542	A 20000512
			JP 2000-151663	A 20000523
			JP 2001-141271	A 20010511

AB Disclosed is a **polyuronic acid** having an av. d.p. less than 20. The method of the present invention comprises the steps: (a) providing a soln. contg. 5 wt.% or more of a high mol. wt. **polyuronic acid** predominantly as its lithium salt; (b) adding hydrogen peroxide and a ferrous salt to the soln. prepd. in step (a) to oxidatively degrade the high mol. wt. **polyuronic acid**; and (c) isolating a **polyuronic acid** having an av. d.p. less than 20 obtained in step (b). Thus, polyguluronic acid and polymannuronic acid were prepd. from alginic acid with lithium hydroxide in presence of hydrogen peroxide and ferrous sulfate.

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d l2 ibib abs hitstr

L2 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2001:830738 CAPLUS

DOCUMENT NUMBER: 135:372182

TITLE: Process for the manufacture of low molecular weight  
polyuronic acids by oxidative depolymerization

INVENTOR(S): Marritt, William

PATENT ASSIGNEE(S): Seiko Epson Corporation, Japan

SOURCE: Eur. Pat. Appl., 17 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1153933	A1	20011114	EP 2001-111559	20010511
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002047302	A2	20020212	JP 2001-141271	20010511
US 2002016453	A1	20020207	US 2001-855128	20010514

## PRIORITY APPLN. INFO.:

JP 2000-140542	A	20000512
JP 2000-151663	A	20000523
JP 2001-141271	A	20010511

AB Disclosed is a **polyuronic acid** having an av. d.p. less than 20. The method of the present invention comprises the steps: (a) providing a soln. contg. 5 wt.% or more of a high mol. wt. **polyuronic acid** predominantly as its **lithium** salt; (b) adding **hydrogen peroxide** and a **ferrous** salt to the soln. prep'd. in step (a) to oxidatively degrade the high mol. wt. **polyuronic acid**; and (c) isolating a **polyuronic acid** having an av. d.p. less than 20 obtained in step (b). Thus, polyguluronic acid and polymannuronic acid were prep'd. from alginic acid with **lithium** hydroxide in presence of **hydrogen peroxide** and **ferrous** sulfate.

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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